# HIV/AIDS AND AGRICULTURE, FOOD SECURITY, AND NUTRITION

Report of USAID Workshop

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# HIV/AIDS AND AGRICULTURE, FOOD SECURITY, AND NUTRITION Report of USAID Workshop, 1-29-03

Purpose: To bring urgent attention within USAID bureaus to the linkages between the AIDS epidemic, as a health issue, and its impacts and drivers in other development sectors, focusing initially on the agriculture sector in the AIDS crisis regions of Africa.

#### The Problem

1. The AIDS pandemic is far worse than most experts predicted, particularly in southern Africa, and continues to spread, regionally and internationally.

The impact of the AIDS epidemic in the hardest-hit countries, particularly in southern Africa, is almost impossible to grasp. Worldwide, over 40 million people are infected. In the past year there were 5 million new infections and 3 million deaths from AIDS – nearly ten thousand deaths each day. These numbers are certain to be higher in the coming year: infection spreads exponentially, and death rates are increasing. In southern Africa (Botswana, Swaziland), 30 to 40% of the population is currently infected with HIV, and population levels in these most high-affected countries will be in decline by the end of this decade.

2. The impact of AIDS is shockingly broad and deep. In particular, it has been – and will continue to be – devastating for agriculture in the region.

The cohort most severely affected by HIV/AIDS is the productive adult segment, and most of the affected population in the crisis region of Africa is rural. In Africa, 7 million agricultural workers have died of the epidemic, since 1985. Agricultural production is thus drastically impacted by the loss of workers, including the lost labor of householders (especially women) whose energy is diverted to caring for those infected or orphaned by the disease. Again, there is a catastrophic circular effect, as resulting poverty and food scarcity enhances the spread of AIDS, both by impairing individuals' immune systems, and by multiplying the vectors of infection.

HIV/AIDS has contributed to significant declines in agricultural production in southern Africa. For example, in Zambia -- one of the countries hardest hit by HIV/AIDS -- maize production has declined by two-thirds in the last decade. Decimation of the core productive population is causing long-term decline in optimal land use and agricultural techniques. The resulting increase in poverty and malnutrition exacerbates the growing rate of new HIV infections and illness and diminishes the effectiveness of health programs.

The catastrophic health impacts of the HIV/AIDS epidemic thus do not begin to measure the true nature of the crisis or its implications for development. By shrinking the productive labor sector, by impairing the capacity of government and NGO staffs, by imposing an enormous added burden of caretaking on households and agencies, by decreasing



investment in every area, and by derailing education – not only of children (infected and/or orphaned) but also of trainees in all public and private sector activities – the epidemic has already created enormous long-term development deficits in Africa, a region already struggling with structural developmental challenges. At the same time, the epidemic's negative impact on economic growth will certainly exacerbate the spread of infection and the difficulties of treatment.

## **Policy Implications**

The AIDS crisis, particularly in southern Africa, has impacts throughout the economy and society, with implications for every aspect of development assistance. It has had especially devastating impacts on agriculture – an important engine of economic growth and also the means of survival for much of the region's population. The urgent need is to find more effective ways to halt the spread of the epidemic and to mitigate its impacts in affected regions.

- 1. Although the public health efforts to curb the spread of HIV/AIDS remain vital, ultimately the public health sector cannot win the war against HIV/AIDS by itself. An effective approach must be multisectoral, with coordinated efforts in all sectors, including health, agriculture, governance, economic growth, and education.
- 2. The agricultural sector is an integral element of a multisectoral approach to AIDS prevention and impact mitigation. The economies of the crisis countries are primarily agricultural. The entire sector has already suffered massive disruption, particularly but not only in terms of labor. A weakened agricultural sector (even before factoring in the impact of drought) jeopardizes the community's capacity both to resist infection and to mitigate its impacts.

Some effective measures within a multisectoral approach are already evident:

- Improved nutrition (including improvements in soil fertility) can enhance immunesystem functioning, which is crucial to both resisting infection and aiding in treatment of AIDS.
- Structural agricultural reform efforts are needed to address the situation of widowed women, who are barred by tradition from undertaking certain high-value sorts of agriculture (such as sugar cane production), and who may have no legal claim to keep the land of the household.
- Research may suggest additional ways to expand livelihood options, particularly for economic empowerment of women.

These and similar efforts that serve to *mitigate* the economic and agricultural impact of HIV/AIDS can also help to *slow the spread* of the epidemic. Moreover, directly preventive educational measures can be integrated into food aid and agricultural development activities for maximum effectiveness. Successful programs in Malawi and Uganda combine food aid



and agricultural improvement with a household approach, maintaining systematic coordination with local leadership. An Education Mobile Task Team approach in eight countries of southern Africa is also having positive effects.

## A. Agriculture linkages

The reality of HIV/AIDS in southern Africa is that it is primarily a rural – not urban – epidemic, affecting women disporportionately. It has impacted every aspect of agricultural production and organization: decreased land in cultivation, labor scarcity, shifts in crop selection toward less valuable but less labor-intensive crops. The resulting sharp declines in productivity will continue to have drastic impacts on food security and nutrition.

The donor community therefore needs to adopt a development approach rather than a disaster relief approach, combining agriculture development programs with food programs and livelihood programs. This development approach needs to include labor-saving techniques, target the most food-insecure areas, target female-headed households as most vulnerable, and target other vulnerable households, such as those with chronically ill adults, fostered orphans, pregnant or nursing women, or young children. Labor-intensive techniques will also be needed in cases where other inputs, such as land and capital, become unavailable because of the impact of HIV/AIDS or other factors.

#### B. Food security and nutrition

Famine is a 'fueling factor' in the spread of HIV/AIDS. In addition to impairing individuals' level of immunity, it has vector effects, in increased transactional sex activity and labor migration. Improved nutrition (including soil fertility) can enhance immune-system functioning, which is crucial to both prevention and treatment of AIDS. Food security is thus a factor in both mitigation and prevention. Not all AIDS victims will receive Anti Retroviral Therapy, but all can receive nutritional support, as a way of "buying time."

Unlike previous emergencies in Africa, the "new variant" famine arising from HIV/AIDS impacts the core productive cohort of adults, rather than the marginal producers (children and elderly). Even under the most favorable scenario, recovery from this crisis will take decades due to this demographic and sociological shift, which changes the profile of rural households and disrupts the transmission of key agricultural and livelihood knowledge

Nutritional assistance succeeds best when based on a **household/family approach** rather than an individual treatment approach, in keeping with the actual mode of use of nutritional supplements. Food assistance can be integrated into other development activities, such as education and treatment, as a way of enhancing participation.

One specific food-supply intervention may directly increase resistance to AIDS: aflatoxin (from peanut mold) weakens the immune-system, and can be combated by improved storage.



## C. Gender linkages

Differences in the incidence of infection, and the differential impact of the epidemic on men and women, have been reported in detail. Also, the impact on household income, assets, and composition, as well as on agricultural production, differs depending on which adult member is infected (male or female head or dependent adult). Women's livelihoods may be impacted by illness of other household members, who need sustained care, as well as by the responsibility of fostering children of deceased kin.

The primary carriers of infection beyond the household are adult men, particularly from high-income households. Anti-HIV/AIDS education efforts need to be targeted to this group in particular.

Specialized agricultural reform efforts may be valuable in addressing the situation of widowed women, who are barred by tradition from undertaking certain high-value types of agriculture (such as sugar cane production), and who may have no legal claim to keep the land of the household. These displaced women are in many cases also infected with HIV, and when they relocate (either within the village or outside) they may spread the infection further, as in the custom of "widow inheritance."

Anti-HIV/AIDS education efforts need to pay special attention to the element of women's empowerment in resisting the spread of infection, particularly with regard to young women and girls.

## D. Development linkages

HIV/AIDS is spread geographically both by avenues of economic development (along highways and truck routes, and by workers in mines and factories), *and* as an effect of economic decline (by out-migration from an impacted area). Economic growth can help to mitigate the impact of AIDS. However, because the chief vectors of infection are higher-income men, the disease is found in rich as well as poor areas.

Economic growth is of course negatively impacted by the epidemic. Because it shrinks individuals' decision-making horizon, AIDS has a negative impact on all forms of investment (capital, labor, education, networking and other social investments). At an aggregate level, AIDS reduces anticipated demand in markets in general; it impacts management functions by undercutting "levers" of reward and discipline.

A key element in the long-term development impact of the crisis is the disruption of education, as children have to leave school for wage labor or to beg on the street. Education is impacted also by the loss of teachers and other mentors and trainers, as in agriculture and business techniques. Knowledge and skill levels can be expected to decline exponentially.

Finally, the loss of manpower in central and local agencies of all kinds impairs the effectiveness of both development and remediation programs by diminishing local absorptive capacity.



## E. Macroeconomic implications

The aggregate impact of the AIDS crisis has not been fully assessed, but it is already clear that for certain countries the implications for economic growth are catastrophic. The cumulative loss of investment, skills, and knowledge, discussed above, have reversed hardwon economic progress.

Production can be viewed as a function of three interacting elements: energy, information, and time. The loss of time, across the board, means that other inputs will have to be radically increased.

Economic modeling activities for southern Africa will, in some cases, need to be revised to factor in a *negative rate of growth*. The crisis adds urgency to the need for a sharper development focus, such as:

- An export strategy can substitute for collapsed domestic demand, where the consumer base has been decimated.
- Exchange rates need to support agriculture and exports rather than facilitate imports.
- Increased investment will be necessary as a substitute for time, in all development activity.

## Implementation Challenges

Dealing with the HIV/AIDS crisis demands an extraordinary degree of cooperation, leadership, and creative thinking. At the same time, the epidemic has diminished available resources, particularly human resources, while presenting a special set of implementation challenges.

### A. Leadership and institutions

The full-blown emergence of the HIV/AIDS crisis in particular regions of Africa reflects deficits in the areas of governance and leadership which must urgently be addressed, if efforts at prevention and mitigation are to have any hope of success. Governance reform and support would in fact provide the necessary basis for more effective development efforts in every sector, including management of the AIDS crisis.

#### 1. Local level

All local institutions have been weakened by the loss of staff as well as leadership. The number of extension workers and teachers is diminishing, even though the need for their work is urgent. The traditional safety nets available to households in crisis have been undermined in many areas.

What alternative institutions may be emerging? In one area, villagers have donated land for the use of female-headed households, whose own lands were lost.



Guidance from community leaders will be crucial in framing and implementing effective approaches to prevention and remediation. A key issue is how development programs can broaden and deepen local capacity to implement assistance efforts.

## 2. National level

The lack of national leadership in southern Africa has allowed the AIDS crisis to emerge full-blown. Elsewhere in the region (as in Gambia and Senegal), effective national leadership promoted prevention and education efforts, successfully keeping the problem at more manageable levels.

In addition to spearheading anti-HIV/AIDS assistance programs, national leaders need to adddress macro-economic issues that impact economic growth, for example, debt levels, inflation, and exchange rates. Agriculture ministries could take the lead in developing workplace policies on AIDS, as a key element in ameliorating the rate and impact of infection.

Aid agencies can consult national and community leaders for input regarding new approaches and development policy changes. By involving these leaders in AIDS discussions, they can help to diminish the stigma effect of the disease.

Donors may need to develop alternative implementation strategies to make better use of non-governmental approaches. Programs need to be designed with redundant staffing and cross-training, to address the vulnerability of human resources.

Private sector corporations can "adopt" a government agency or department in a recipient country, to provide mentoring and support staff.

#### 3. International development agencies

Donors, too, need to provide a more effective kind of leadership in addressing the AIDS crisis. A key priority must be to develop strategic consensus and policy coordination with the recipient government, as well as within the circle of donors and NGOs. Anti-AIDS strategies will require close cooperation across sectors: health, agriculture, democracy, economic growth. Sectors within USAID Missions need to have a champion for AIDS preventiion and mitigation of its impact. Programs will also need to develop partnerships and/or communication with private sector entities.

Two suggested approaches would analyze the AIDS aspect for every development initiative undertaken in the region:

- The AIDS audit approach assesses a program's vulnerability to AIDS impact. It
  can be applicable to all development programs, as one element of a broader riskfactor assessment, and should be stakeholder-driven.
- The **AIDS "lens"** would be part of the design of all policies and programs: assess needs, analyze capacity, identify action. The basic criterion here is "Do no harm."



All proposals and reporting would include an HIV/AIDS analysis, perhaps with a related discussion of multi-sectoral and public-private partnerships.

## **B.** Implementation barriers

The best-designed intervention will face special implementation problems, in interacting with national agencies, NGOs, local community stakeholders, and target households.

## 1. The hyper-trauma effect

In crisis areas, aid administrators must assume that every participant has been traumatized by the loss of colleagues, friends, and family members. Hyper-trauma reaction can impair the effectiveness of decision-makers and implementers at every administrative level, and may affect the capacity of program recipients to fulfill expectations.

USAID mission staff may be similarly affected by the personal impact of the crisis, reducing productivity as well as ability to adapt.

## 2. Cultural and moral aspects

The lack of open discussion of the AIDS epidemic impedes planning, cooperation, and leadership. At every level from ministry staff to households, stigma and prejudice interfere with prevention and treatment efforts. In Botswana, people were reluctant to seek treatment even when it was made available at no cost. Nursing mothers discard donated formula, as stigmatizing, and so reinfect infants successfully treated for the virus.

Nutritional assistance may be hampered by resistance to imported foods, now heightened by the issue of genetic modification.

Some traditional practices, such as widow inheritance, may help to spread infection. Education can help make people aware of this risk.

#### C. Resource constraints in assistance programs

Aside from the inevitable limitations of funding, needed programs of education, training, and structural reform may be further constrained by the limited availability of staffing resources, not only on the part of donor agencies but, most acutely, on the part of counterpart agencies at every level. The limitations of funding and manpower make it essential that assistance efforts be carefully coordinated and leveraged through strategic alliances with other agencies, non-governmental organizations, and the private sector.



# Future Efforts

Looking forward, it is clear that top-level attention will be required to establish priorities and formulate appropriate actions, based on systematically collected research and field data. Policy coordination will be essential, as will strategic partnerships.

## A. USAID Leadership

The HIV/AIDS pandemic is a crisis that ranges through multiple sectors and has multiple drivers, including lack of leadership, local capacity constraints, and women's lack of empowerment. This means that the necessary awareness and commitment to reform must emanate from the highest levels of government as well as the lowest in the afflicted countries. One of the challenges, as diverse sources of new funding are developed, will be to coordinate these funding streams so they address the crisis in all its dimensions.

In particular, multisectoral approaches will need to be given top-level recognition to overcome the many obstacles to effective collaboration. Certainly, the structural and economic dimensions of the crisis are often seen as competing for funds with health concerns and individual treatment programs. As the crisis unfolds, however, it will become increasingly apparent that the *structural impacts* of HIV/AIDS represent a major impediment to the delivery of health services as well as to other efforts to mitigate the development impacts of HIV/AIDS. Serious attention must be given to the critical balance between long-term agricultural development needs, emergency assistance, and HIV/AIDS prevention and mitigation measures.

There is much more USAID and other donors can be doing within the parameters of existing programs and guidelines to increase multisectoral programming.

- Within USAID, the Africa, Global Health and EGAT Bureaus have a wealth of knowledge and experience in this area, as do many outside experts from academia, consulting firms and NGOs. This experience needs to be captured and fully utilized in the process of designing new programs, not only within USAID but also in the work of other agencies and donors.
- USAID and other donors need to view their activities in every sector through an analytical lens of how HIV/AIDS is impacting progress and how they may be restructured, or how future designs may build in HIV-mitigating elements.
- Increased policy support is needed for addressing the impacts of HIV/AIDS. Without high-level recognition of this issue as a priority (both within USAID and across the US government as a whole), all the good work at the field level will be work done against the tide.
- HIV/AIDS policies must become part of mainstream development thinking. This issue needs to be on the agenda of USG leaders as they make speeches, coordinate with other donors, and talk with African leaders. The message must be cogent and based on a consensus about priorities and best approaches.



Much remains to be done, both in research/program design and in implementation. As urgent as the situation is in the African region, similar efforts are just as urgently needed in parts of the world (such as South and Southeast Asia) that are now showing the level of HIV/AIDS incidence that Africa showed ten years ago. The potential for further devastating structural impacts due to HIV/AIDS is so high that we must be prepared to harness experience and resources across all sectors in a coordinated effort to combat this terrible disease

### B. Research needs in the agricultural sector

## 1. What works? What doesn't work?

Gambia and Senegal successes were due in some large part to national leadership in an anti-AIDS education effort, which slowed the epidemic in its early stage. Success in combating the epidemic in the Sahel was due to a sustained policy dialogue conducted with the national leadership. Programs in Malawi and Uganda combine food aid and agricultural improvement with a household approach and systematic coordination with local leadership. An Education Mobile Task Team approach is now in place in eight countries of southern Africa, and is having positive effects.

More analysis is needed in several areas. How do afflicted communities recover? What alternative support systems or safety nets are emerging at the local level?

Research is also needed to document the differential effect of subsidies vs. income transfers. In Zambia, a government subsidy for maize produced severe market distortion; maize became the sole staple, displacing a number of traditional agricultural products – and has now experienced a production decline of 70% in the past decade.

#### 2. Local strategies

Crop selection needs to be tailored to locally available resources (labor, land, and other inputs), based on actual local data of relative returns to inputs. Research may suggest ways to expand livelihood options, especially for women.

Local knowledge of farming practices and of traditional medicine needs to be salvaged before it disappears.

## 3. <u>Program design</u>

How can emergency response programs be designed to take account of the needs of long-term economic growth? Where these objectives conflict, how do we balance them?

What sort of strategy can best integrate food assistance with treatment and education programs? How can programs build capacity?

How can we "scale up" islands of excellence?



## C. Prioritizing assistance efforts

A strategic approach will require donors to rethink the entire "menu" of development initiatives, and to prioritize assistance efforts. The rethinking process calls for detailed information and needs assessments regarding local circumstances.

The question of the appropriate standard for setting assistance priorities is an important and difficult one. Three criteria emerged from this discussion:

- Donors will need to determine carefully what objectives and approaches are feasible under current circumstances.
- *Local empowerment* must be an essential ingredient in implementation, to have a sustained impact.
- Priority should be accorded to efforts that would be necessary or helpful for long-term development. Macro-economic reforms, for example, may need to be given priority over short-term interventions.

#### D. Resources to build on

#### 1. Organizations

The presentations and discussion pointed to a number of organizations that are closely involved in developing and implementing the sorts of efforts that will be needed. They include

Two regional economic integration institutions:

SADEC, the Southern Africa Development Community ECOWAS, The Economic Community Of West African States

- TASO (The AIDS Service Organization)
- USAID missions, as a source of information and initiatives
- Partnership to Cut Hunger and Poverty in Africa
- RENEWAL
- Education Mobile Task Team model program
- BIFAD, The Board for International Food and Agriculture

## 2. <u>US Government Resources</u>

Food assistance efforts will need to take full advantage of the PL480 Program.

#### 3. Documents

A matrix of policy issues has been developed by SADEC (the Southern Africa Development Community) to assist in coordinating and prioritizing development efforts.



## E. Next steps for involved parties

#### 1. USAID Task Force

A USAID Task Force, convened by PPC, will lead further internal discussion, focusing on sharing models, lessons, and knowledge from field missions. The Task Force will continue to shape a multisectoral response, including agriculture and other sectors, to the HIV/AIDS pandemic.

## 2. Higher Profile

PPC will bring the discussion to higher organizational levels, within USAID as well as through inter-agency discussions, to refocus attention on HIV/AIDS throughout the internal and external dialogue on development issues.

#### 3. Community of Practice

USAID leadership will be needed to create a community of practice, coordinating with civil society groups as well as other donors and governments, including such organizations as G-8, DIFD, and DAC.

### 4. White House Coordination

USAID needs to interface with the new White House HIV/AIDS initiative to ensure that adequate attention is accorded to multi-sectoral initiatives and not exclusively to the medical aspects of the crisis. USAID can also assist in:

- Producing a government-wide strategy
- Creating awareness of relevant field experience
- Creating awareness of institutional and governance needs
- Coordinating resource flows

#### 5. Other Regions

USAID and other USG agencies need to extend the lessons from Africa to other regions (particularly South and Southeast Asia) to prevent future pandemics.

